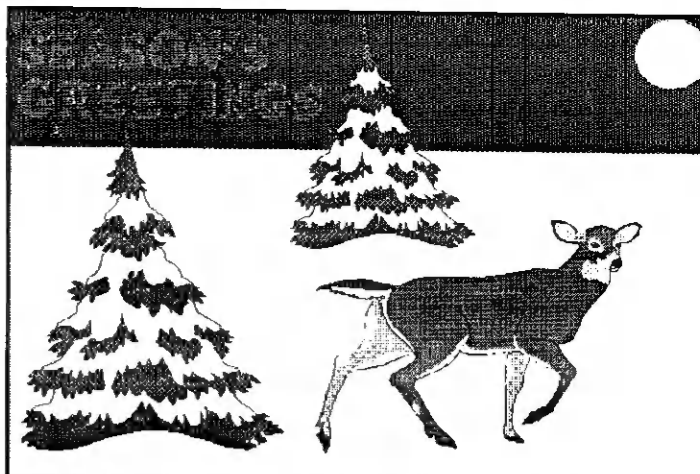


MARC

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Volume X No. 12 December 1994



With full power, the Mid-State Amateur Radio Club repeater, will continue it's reputation as the home of the best ham radio club in Indiana! -NT9J.

November VE test upgrades

NAME	CALL	LIC.	CITY	UPGRADE
John Cooper	N9VZD	General	Flat Rock	Advanced
Maynard Payne	N9VPH	Tech	Shelbyville	General
Lori Rudder		None	Plainfield	NC Tech
David Smith		None	Indianapolis	NC Tech
James Voll		None	Columbus	Tech +
Mark Wainscott		None	Gwynneville	NC Tech

VE TESTING TEAM STATISTICS

YEAR	NOVICE	NC TECH	TECH+	GENERAL	ADVANCED	EXTRA	UPGRADES
1989	0 0%	0 0%	36 40%	17 19%	7 7%	6 6%	66 74%
1990	0 0%	0 0%	18 20%	15 16%	9 10%	8 8%	50 55%
1991	2 1%	33 29%	25 22%	11 9%	5 4%	9 7%	85 74%
1992	1 1%	39 34%	16 14%	10 8%	7 6%	2 2%	75 65%
1993	2 1%	42 29%	23 16%	9 6%	10 7%	2 1%	88 61%
1994	2 1%	42 26%	14 9%	13 8%	9 5%	2 1%	82 50%
	7 1%	156 22%	132 19%	75 11%	47 7%	29 4%	446 63%

The above statistics represent results of testing from 1989 through 1994. A study of the above figures bears out the feeling of the team that applicants are not as well prepared as they used to be. Many applicants attempting the NC Tech license pass element 2 and fail element 3A on the first try.

Testing will resume in Franklin on March 18, 1995.

Spring Novice Class

According to Dave KA9OOH, the annual club-sponsored Novice class is scheduled to begin on Monday, February 6th at 7 PM in the EOC.

This year the class will meet on the first three Mondays of each month and will not meet on the 4th Monday.

The publicity is ready to be sent out to billboards, papers, and radio stations.

If you have a "bulletin board" at your work or business and would like to have a flyer to post there you should contact Dave at the meeting this Saturday.

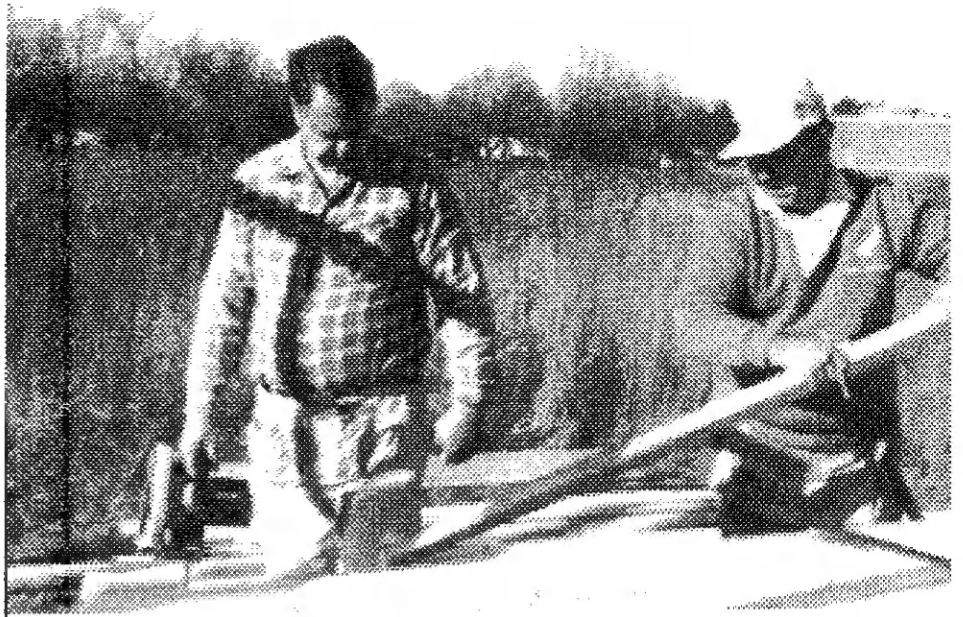
Club members are encouraged to help us get the information out to the central Indiana community.

So, mention it often on the club repeater!



We planned..

K9PDI and N9WTF



We nailed...

**N9QBO, AA9KT,
N9WTF, and K9PDI**



We ran cable

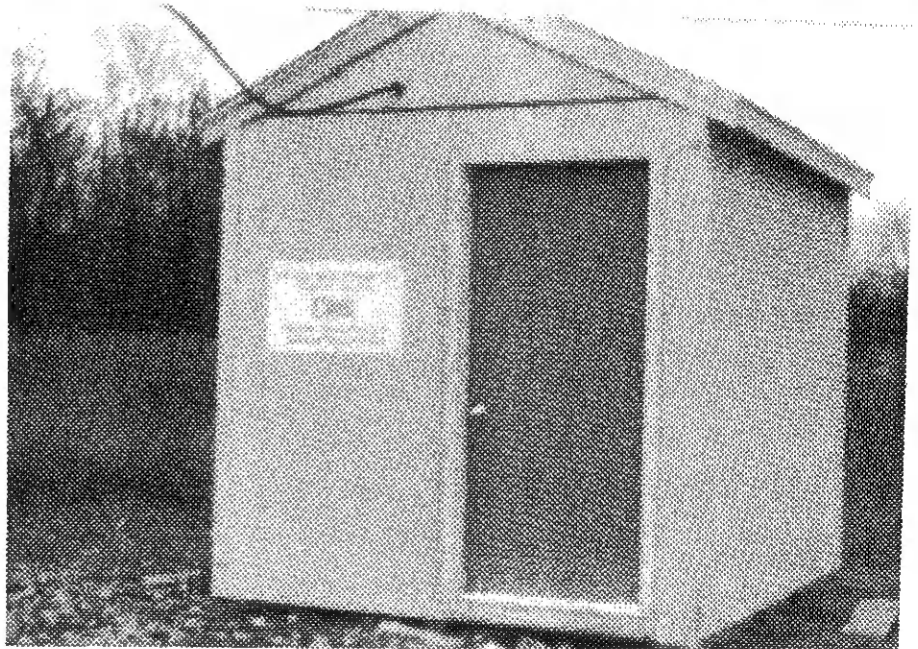
Tower Crew



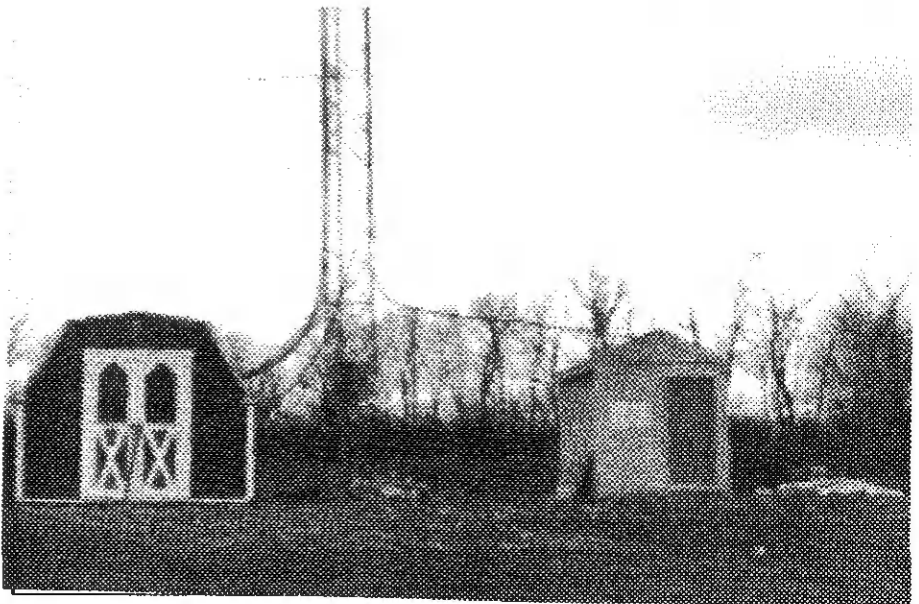
**We lost the
top climber in
the fog!**



**We installed
the repeater**



**And we're all
ready to go!**



Christmas Area hams are Party honored

It's beginning to look a lot like Christmas. And by the time you read this story you should have most of your shopping done. If you don't, I would recommend that you put this newsletter down and head for the mall immediately.

Seriously, it's been a busy year for the Mid-state ARC. We have accomplished a lot and now it's time to celebrate. Our Saturday December 17th meeting will be a party complete with coffee, donuts and orange juice.

This will be a social event. Since we don't have a scheduled VE testing session following the meeting everyone can take extra time to relax and rag chew. It will be a perfect opportunity to visit the new repeater shack that many of our members have worked so hard to build. Anyone wishing to see the new antenna on the 400 foot tower must bring their own climbing belt.

According to Joe Rogers, KF9LQ, many of the regulars will be meeting at the House of Franklin around 7 am for the usual scrambled eggs, biscuits and gravy appetizers before heading to the EOC for donuts.

Whatever your taste, join us at 8 am in the EOC for a morning of fellowship and ham radio talk as we celebrate a great year in the life of the Mid-state Amateur Radio Club.

-NT9J. , Dee Dee, Christine and Jay

Congratulations to Keith Jordan, N9UTJ, for being honored as a 1994 recipient of the Hendricks County Sheriff's Award. Keith is one of three amateur radio operators in Hendricks county to be honored for his contributions to public safety in the community.

As a Mid-State ARC member Keith often crosses county lines to help other hams with personal and club projects. This is the fourth year that the Hendricks county commissioners and the sheriff have recognized amateur radio operators for their special talents and community service. The awards program was coordinated by Jay Wright, N9IMT. Both Jay and Keith are Mid-State ARC members.

There were almost forty amateur radio operators nominated for the awards. Twelve awards were presented. Among those honored was Bert White, WD4HCL.

Bert has been a familiar face at the spring equestrian event held at the Johnson County Horse Park. She was recognized by the sheriff for her participation in public service events and for being a net control operator.

Jay, Keith and Bert are perfect examples that public service with amateur radio knows no boundaries. -NT9J.

Come to the meeting this saturday and talk to old friends during this social meeting!

Headphones

By Paul Wilkins, AB4CY

The use of headphones (also called earphones) has several benefits. Headphones reduce the room noise so you can hear signals from the radio better. But they can also be a courtesy toward those who don't care for CW, ham chatter, or static.

Headphone elements evolved from magnetic telephone "receivers" still in use today. They were designed with several thousand ohms of resistance to match the high output impedance of a vacuum tube amplifier.

"Crystal" phones, an exotic variation, use piezoelectric crystals to produce sound. These phones have even higher impedance, and good frequency response - much better than magnetic phones, which typically "cut off" above 3500 Hz.

All of today's headphones are of the "dynamic" variety - built like miniature permanent-magnet loudspeakers. Their impedance is low (under 20 ohms) for today's solid-state amplifiers.

In handheld or QRP ham gear, a major portion of battery capacity goes into driving a loudspeaker. Using headphones will yield at least twenty five percent more battery life.

So if you don't use headphones, get a pair and try them. But be careful to keep the audio level down. Headphones can produce enough sonic energy to damage hearing over time.

from the July 93 Foundation for Amateur Radio and ARNS

The electronic ten commandments

1. Beware the lightning that lurketh in the undischarged capacitor, lest it cause thee to bounce upon thy buttocks in a most undignified manner.

2. Cause thou the switch that supplieth large quantities of juice to be opened, yea, turned firmly off, that thy days may be long in this world.

3. Prove to thyself that all circuits that radiateth and upon which thou worketh are grounded, lest they lift thee to a higher-frequency potential and thus grant thee entry to radio heaven.

4. Tarry thou not amongst those fools who engage in intentional shocks, for they are surely nonbelievers and so are not long for this planet.

5. Take care that thou useth the proper method when you takest the measure of a high-voltage circuit, lest thou incinerate both thee and thy valuable meter.

6. Take care thou tampereth not with interlocks and safety devices, for this incurreth the wrath of thy seniors and bringeth the fury of these seniors upon thy head and about thy shoulders.

7. Worketh thee not on energized equipment, for if thou so dost, thy fellow workers will surely buy beers without thee, and thy space at the bar will evermore be filled by another.

8. Service thy equipment not alone, for electrical cooking is a slothful process and thou mayest sizzle in thy own juices for hours upon a hot circuit before thy maker sees fit to end thy misery and drag thee into his fold.

9. Trifle thou not with radioactive tubes and substances lest ye commence to glow in the dark like a lightning bug and cause thy wife to see no further use for thee except for thy wages.

10. Committeth thee to memory the works of the prophets, which are written in the instruction manuals, for they surely giveth the straight dope.

While several of these entreaties don't really apply to the low voltage solid state circuits of modern-day electronic equipment, there's wisdom in the words. These tongue-in-cheek commandments humorously but firmly remind us of the deadliness of the circuits with which many of us work every day. So take heed, and consider this possible 11th commandment:

11. Be thou not afraid to ask stupid questions, for verily they are cheaper and safer than stupid mistakes.

from Sept 94 CQ submitted by Charlie Sears N9MEW

Power level?

By Jeanette Demario, K8PYN

I'd like to know if any other ham has a transmitter as powerful as mine. One of my neighbors claims:

1. I have caused her sewer to plug, so she can't flush her toilet.

2. I've caused her iron to get

so hot it burns all her clothes.

3. I've ruined her alarm clock; it won't ring anymore.

4. Her refrigerator "clicks."

5. Her hot dogs are "charged" when she cooks them. (Does that make them spicy?)

6. I'm causing her children to get pimples. (RF rash?)

7. I'm causing the rust spots on her metal porch roof.

8. Her city water is charged, and so is her telephone.

9. My radio burned down another neighbor's garage.

That's pretty impressive for 150 watts, don't you think?

from Mar/Apr "YL Harmonics" and ARNS

Phone blues..

When the phone in the next office of the courthouse rang, Raymond answered it, saying, "The driving examiner is out at the moment. Would you like me to take a message?"

"Yes," the voice on the other end replied.

Raymond waited patiently, but finally asked, "Well, what's the message?"

"You mean you aren't a recording?" the voice asked.

"No, I'm Raymond."

"Oh, I'm sorry. I was waiting for the beep!"

***1926 (April) The ARRL issued the first certificate for Worked All Continents; 35 WAC awards went out before that year ended.

Wireless: in our future?

By Wayne Thalís, KB6KN

An old adage says, "history repeats.." It does, indeed, even words can become popular a second time.

These days, the media are full of talk about the future "digital information superhighway"-referring to an integrated electronic communications network. Wireless devices will be key elements of the system. Our federal government expects to play a major role in system planning and implementation.

Original Roadway

In 1842, Samuel B. Morse demonstrated the first successful electrical communication network. But no one ever referred to the telegraph network as a super highway. It was more of an alley. Slow as it was by today's standards, it was the first practical application of digital communications.

Morse, who was an accomplished landscape and portrait painter, was equally gifted as an entrepreneur. He persuaded our federal government to do something it had never done before - provide a subsidy to a private citizen, to underwrite the construction of a demonstration line between Baltimore and Washington.

The telegraph eliminated communications delay over great distances. It soon revolutionized commerce, expanded the role of the

news media, and reshaped military operations.

Morse expected his telegraph to supplant the mail. but after failing to attract private investors, he offered his invention to the government for \$100,000. Demonstrating its usual clear foresight our government declined.

Limitations

The cost of installing the lines, and then maintaining them, were major concerns. Distance limitations in the original system were another. A series of inventions soon overcame the second problem - automatic repeaters. But the repeaters contributed significantly to system costs.

Another limitation was traffic volume. A single wire could handle only one conversation at a time. The most highly skilled operators could send and receive only 25 to 30 words per minute.

In 1972, the introduction of the Baudot Multiplexer permitted as many as four sets of telegraphers to use a line at one time. The other inherent limitations remained.

Eliminating wires

Almost from the beginning of telegraphy, investigators started searching for ways to eliminate the wires. Over a century ago, pioneers like Mahlon Loomis, Reginald Fessenden, and Nikola Tesla tried to invent wireless telegraphy. Guglielmo Marconi finally demonstrated practical and commercially viable wireless telegraphy in 1901.

The future

By the 1920's, the newfangled science of wireless was called radio. Today the development of wireless communication technology is again in the news. Does that mean we're going back to spark-gaps and crystal sets? Hardly.

The phrase "wireless communications" now applies to future versions of currently hard-wired public and private networks of telephones, computers, fax machines, and other home and office equipment.

Tiny low-power radio transceivers incorporated into the products will provide links to networks. Users will have mobility, and (they say) installation and maintenance will be much simpler.

So wireless may again become the wonder of the age. And this time it won't be dominated by the military and a few adventurous amateur operators. ("Adventurous amateur operators" seems a fitting description of some of today's hackers. But when it comes to dominance, you can bet that someone, or some organization, will make a run on any valuable resource. -ed.)

from the Feb. 94 Santa Cruz RC "Short Skip" and ARNS

*** 1912 (August 13): The Department of Commerce issued the first experimental radio license.. to St. Joseph's College, Philadelphia, Pennsylvania. It was (3XJ; 2 kilowatts).

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*** The absentminded biology teacher said to the class, "Today we are going to dissect a frog." He unfolded some paper and reacted as he saw a sandwich. He shook his head, puzzled, and said, "I distinctly recall eating lunch earlier."

*** You're aging when your actions creak louder than your words.

*** An elephant doesn't watch where he's walking and steps on and flattens a gnu. A kid walking by with his mother asks, "What's that under the elephant?" The mother answers, "There's nothing son, under the gnu."

*** "Mama, why do elephants have such big trunks?" "Well, they do have to come all the way from Africa."

*** A rookie on leave walks into a recruiting office and says to the recruiting officer, "Can you give me that sales talk again? I'm getting discouraged."

*** It was during the war when men were being drafted. To make sure he escaped, Larry Daniels borrowed a truss from a friend of his and wore it to the recruiting office. The doctor took one look at him, smiled, and asked, "How long have you been wearing this truss?"

"Ten years, sir."

"OK, you're in the tank corps. Anybody who can wear a truss upside down for ten years can stand a tank."

*** Modern art is where you paint on canvas, wipe off your brushes with a rag, and then sell the rag.

*** Two expectant fathers pace the waiting room. One of them complains, "Darn it, can you believe this is happening to us on the first day of our vacation?"

The other one said sadly, "What are you complaining about? This is our honeymoon!"

*** The Beverly Hills millionaire shows his daughter the new house he built while she was away in school. It has huge servants' quarters, a tennis court, dog kennels, stables, cabanas, and an Olympic-size swimming pool.

When they reach the pool, hanging around or swimming are some of the young rich men of the neighborhood. The daughter claps her hands gleefully and says, "Oh, Daddy, this is a fantastic pool. And you've even stocked it for me!"

*** "Why did Moses wander in the desert for forty years?"

"Because even then a man wouldn't stop and ask for directions."

*** A nervous salesman asked a statistician what the odds are of boarding a plane that has a bomb on it. The man checked data and told him, "The odds against you getting on a plane with a bomb are two billion to one."

"I fly a lot and don't like those odds."

"Well, if you really want to be safe, take a bomb with you. The odds are four billion to one against boarding an aircraft with two bombs on it!"

*** He gave his young nephew a book for Christmas. He spent six months looking for where to put the batteries.

*** Christmas is the time of year kids get toys their fathers can play with.

*** Santa Claus must be a hippie. He never shaves and works one day a year.

*** There are a lot of names for Santa.....there's Kris Kringle, Saint Nicholas, Mastercharge.

*** Every Christmas is described as the greatest ever. I always thought the first one was.

*** One department store had two Santas during Christmas - one was an express line for kids who wanted nine toys or less.

*** Three stages of man: He believes in Santa Claus; he does not believe in Santa Claus; he IS Santa Claus.

*** Think of it this way - your Christmas presents of today are the garage sales of tomorrow.

*** I've been shopping all week, but I still can't find that one precious thing I'm looking for - a parking space!

*** For a Christmas gift, my kids always give a bottle of English Leather. It smells like my wallet.



BENS WEATHER TIPS

By Ben Woods Channel 8 TV

Hope you're finding ways to get into the holiday spirit because the weather has not been very typical for early December. Hopefully, those of you that had need to do any late fall antenna work have taken advantage of the unusually mild weather. November was also very warm and will go down as the fourth warmest November on record in Indianapolis.

The monthly average temperature was 48.6 degrees (5.6 degrees warmer than normal). Along with the warm temperatures was an absence of snowfall. It was only the third time Indianapolis has gone through all of November without even a trace of snowfall. Never before have we gone so long through the autumn without seeing our first flake.

Officially, the previous record for latest date for first snowflakes was December 1, 1946. Rainfall last month totaled 3.40 inches which is 0.17" above normal. This is the first month to have above normal precipitation since June.

The outlook for December calls for a high probability of above normal temperatures and above normal precipitation. Does all this suggest that perhaps we won't need snow shovels and boots this

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year? Don't be fooled! The last time we had a snow-free November and October was 1990 and we ended up getting nearly 10 inches of snow in December, including a white Christmas!

So don't be assuming any of those Christmas gifts that need to be installed on a tower will be done in the same weather we've been having lately. Old man winter may still surprise us. Merry Christmas and a Happy New Year!

MARC

Mid-State Amateur Radio Club

Post Office Box 836 Franklin, In. 46131

Club Repeater: 146.835

The Mid-State Amateur Radio Club meets at 8:00 AM the third saturday of each month in the Johnson County Law Enforcement Bldg. on Hospital Road in Franklin, In. All are welcome to attend.

President: Randy Shake KC9LC

V. President: Dave Reneau AA9KT

Secretary: Marilyn Parton N9TUK

Treasurer: Mac McCarty NV9K

Editor: Mac McCarty NV9K

RACES: Joe Vergara KA9ZPA

ARES: Vernon Gill N9QBO

Activities: Jack Parker NT9J

Rptr. Trustee: Dave Julian WB9YIG

Weather: Ben Woods Channel 8

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